Work Ordei January-15-14 1:	r <b>ID 111572</b> 18:30 PM		*111!	572*		~~~	tel	) 		Page 1
Revision ID:	03574-5		Accept	*N900	<u>040</u>	100	<b>)*</b> s	Setup Star Stop	171	S1*
	Cabin Floor Protector	ili Aili							^1\/	S2*
	/15/14 Start Qty: 1.0	•		Cust Item						
Required Date: 1 Reference:	./15/14 Req'd Qty: 1.0	<sup>00</sup> *1*		Customer:						•
Approvals:	Process Plan: MUS	Date: 14-01-	<b>⊘</b> Tooling:	D	ate:	_	F	Run Star	"1/3	R1*
	QC:	•			ate:			Stop	, *N	R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr									
D3574	Rev B									
100			0.00			·				
*100* Waterjet FLOW CNC Waterjet			ev: B Prog Rev: B	_ 2-				0		<u>Jn14-</u> 02-3
110	QC2- Inspect parts	off machine FAI/FAIB	0.00							<b>~</b>
*11 <b>0</b> *			0.00						<u>*</u>	JM14-02-
QC Quality Control	Memo	)	0.00							e.
			DAS							
120	QC8- Inspect parts	s - second check	0.00				1			
*120*			0.00 141213	)				<u> </u>		
QC	Memo	0	0.00							

Quality Control

						·					DQA:	Date	:
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORN	/ANCE / UP	DATE			
											QA Closed:	Date	•
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
WOIK OIG	٠	·				Rework	٦		Skid-tube	Crosstube	1	Water Jet	Engineering
Part 1	۷o.					Scrap	1		Machining	Small Fab	- Pro	d. Eng. Coor.	Quality
			···		<del></del>	Use-as-is	1	1	noforming	Finishing	<b>-</b> ∤	re/Packaging	Other
NCR I	No.					Work Order Update	1	6	Large Fab	Composite		Supplier	
Root					l	ption of work order update		Initial		tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ct	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling			Į								1		
Operator			]									ļ	
Material			1	ļ			ļ						
Setup									i			ļ	
Other							ł						
Process			1										
Supplier	L												
Training	L												
Unapproved				<u> </u>			<u></u>						
						······································	FAUI	LT CATE	GORY				
Landi		3			_	General		7			٦		٦
	-	Bending				Bend	$\vdash$	Grain			Ovalized	., -	Pressure/Forced
	_	Centre N	ot Conce	ntric to	<sup>O/S</sup>  -	BOM/Route	-	Hardwa		<u> </u>	Over/Under	<del> </del>	Temperature/Cure
	$\vdash$	Cracks			<u> </u>	Broken/Damaged	-	- '	ion incomplete	,,,,,, <u> </u>	Part Incorre	<b>-</b>	Weld
	$\vdash$	Crushed/	Crimped		<u> </u>	Burrs	$\vdash$	-1	ions Incomplete	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
	$\vdash$	Cuffs			<u> </u>	Contamination	$\vdash$	Mainte			Part Moved		
	<u></u>	Heat Tre			<u> </u>	Countersink	-	Mislabe		<u> </u>	Positioned \		٦
1	1	Inspection	ın Strip in	Tube	- 1	Cut Too Short	1	Misread	t		Power Loss,	'Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work	Order	ID	111	572
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## \*111570\*

Page 2

January-15-14 1:18:30 PM \*N900040100\* D3574-5 Accept Setup Start Item ID: **Revision ID:** Cabin Floor Protector **Item Name:** \*1\* **Start Date:** Start Oty: 1.00 **Cust Item ID:** 1/15/14 Req'd Qty: 1.00 Required Date: 1/15/14 \*1\* **Customer:** Reference: Run Start Process Plan: Date:\_\_\_\_\_ **Tooling:** Date: **Approvals:** Stop Date: SPC (Y/N): QC: Date: Tool # Plan Reject Reject Insp. Sequence ID/ Operation Set Up/ **Tool ID** Accept Qty Oty Stamp Work Center ID Description Run Hours Code Number 0.00 130 Small Fab \*130\* 0.00 Small Fab Memo Deburr if necessary. Small Fab QC5- Inspect part completeness to step on W/O 140 \*140\* Memo **Quality Control** 

150

Identify as per dwg & Stock Location:

0.00

\*150\* Packaging

Packaging

Memo

0.00

-14/2/3 (1) l

											DQA	Dat	e:	
NCR: Y	⁄es	/ No				WORK ORDER NON-C	ON	4FORI	MANCE / UPI	DATE	0461			1800 000
											QA Closed	: Dat	e:	
Work Orde	or:				;	DISPOSITION	l			AGAINST DE	PARTMENT	/PROCESS		
Part N	- . ۱o.					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube  Machining noforming  Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet od. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Post					Doscri	ption of work order update		nitial	Λct	tion	Sign &	<u> </u>		
Root		Date	Step	Qty		or Non-conformance		ief Eng		ription	Date	Verification	.	QC Inspector
Cause Doc/Data		Date	step	Qty		or ivon-comormance	CII	iei ciig	Desci	прион	Date	Vernication	Ή	QC IIIspector
1														
Equip/Tooling Operator	-													
Material														
Setup	$\dashv$													
Other	$\dashv$												1	
Process	$\vdash$								:					
Supplier	$\vdash$					•			:					
Training	$\vdash$						Ì							
Unapproved	H													
опаррточеи			<u> </u>	<b>.</b>		F	AUL	T CATE	GORY		<u> </u>	<u> </u>	1	
Landi	ng G	ear			·	General								
		Bending				Bend	П	Grain			Ovalized	Γ	$\neg$	Pressure/Forced
	-	Centre No	ot Conce	ntric to	o/s $\vdash$	BOM/Route	$\vdash$	Hardwa	re		Over/Unde	r tolerance		Temperature/Cure
	-	Cracks			``	Broken/Damaged	$\vdash$	1	on Incomplete	<u> </u>	Part Incorre	+	_	Weld
		Crushed/	Crimped		-	Burrs	-	ł '	ions Incomplete/	Unclear	Part Lost/N	<b>}</b>		Wrong Stock Pulled
		Cuffs				Contamination	-	Mainte	•		Part Moved			
	$\vdash$	Heat Trea	ıt			Countersink	-	Mislabe			Positioned			
	_	Inspection		Tube		Cut Too Short	$\vdash$	Misread			Power Loss		$\neg$	Other
	$\vdash$	Ripples in	-			Drill Holes	$\vdash$	Offset		L	_	·	_	

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

Work Order ID 111572

\*111572\*

Page 3

January-15-14 1:18:30 PM Accept \*N900040100\* Setup Start Item ID: D3574-5 **Revision ID:** Stop **Item Name:** Cabin Floor Protector \*1\* Start Qty: 1.00 **Cust Item ID:** 1/15/14 **Start Date:** Req'd Qty: 1.00 Required Date: 1/15/14 \*1\* **Customer:** Reference: Run Start Tooling: Date: **Approvals:** Process Plan: Date: Stop Date: SPC (Y/N): Date: QC: Reject Reject Insp. Tool # Plan Accept Set Up/ Tool ID Sequence ID/ Operation Number Stamp Qty Code Qty **Work Center ID** Description **Run Hours** 0.00 QC21- Final Inspection - Work Order Release 160 \*160\* 0.00 OC. Memo Quality Control

ŕ

NCR: Yes / No	WORK ORDER NON-CON	WORK ORDER NON-CONFORMANCE / UPDATE						
Work Order:	DISPOSITION	AGAINST I	DEPARTMENT/PROCESS					
WORK Order.	Rework	Skid-tube Crosstube	Water					

Part No					Rework Scrap Use-as-is Work Order Update	_	f Thern	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	→	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	iption of work order update		Initial	Act	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance		nief Eng		ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												
landin					General	FAU	LT CATE	GURY				·, · · · ·
Landin	Bending Centre N Cracks Crushed, Cuffs Heat Tre Inspection Ripples i Torque N	on Strip in n Bend Waves in I Sequence	Tube Extrusion		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish		Instruct Mainte Mislabe Misread Offset Out of 0	ion Incomplete cions Incomplete/l enance eled	Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned \( \) Power Loss/	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
1	Wave/T	wist in Tul	be		Folio		Outside	Dimensions				

Date:

Date:

January-15-14 1:18:29 PM

Work Order ID:

111572

Parent Item:

D3574-5

**Parent Item Name:** 

Cabin Floor Protector

**Start Date:** 1/15/14

Required Date: 1/15/14

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev : A New Issue 07.07.23 EC verified by: JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.125-F60029-04 GE PLASTICS LEXAN SH	IDDE	Purchased	No				sf	3,145.9900		26		Jm14	-cz-3

Location	Loc Oty	Loc Code	
MAT019	3145.99		
124866	106		
m126425	479.99		
m127934	2560		127934

DQA: Date:	
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NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

	-								QA Closed:	Date	<b>:</b> :	
Work Order					DISPOSITION			AGAINST DE	PARTMENT	PROCESS		
Part No	0.				Rework Scrap Use-as-is Work Order Update	Th	Skid-tube  Machining ermoforming  Large Fab	Crosstube Small Fab Finishing Composite	-4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
ivel( iv	·				Work order opudie	<b>'  </b>	carge rab	Composite	_1			
Root				Descri	ption of work order update	Initia	ıl A	ction	Sign &			•
Cause	Date	Step	Qty	(	or Non-conformance	Chief E	ing Des	scription	Date	Verification	QC Inspector	
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training												
Unapproved	<u> </u>	<u> </u>			-	<u> </u>	TECODY					
l andin	- C					AULI C	ATEGORY					
Lanoin	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence			General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Insp Inst Ma Mis Mis Offs	dware pection Incomplete ructions Incomplete intenance labeled read	:/Unclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other	-	
ŀ	Wave/Tw				Folio	$\vdash$	side Dimensions					

DART AEROSPACE LTD	Work Order:	5F2111
Description: Cabin Floor Protector	Part Number:	D3574-5
Inspection Dwg: D3574 Rev: B		Page 1 of 2

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø3.00	+0.006/-0.001	3.005	_		ν	Ilmoi
7.37	+/-0.030	7.37	-		v	J
11.00	+/-0.030	11.00	-		U	
15.25	+/-0.030	15.25	-		T	Jemos
25.87	+/-0.030	25.83	_		1	
39.75	+/-0.030	39.75	-		+	
44.75	+/-0.030	44.75	_		<b>T</b>	
49.11	+/-0.030	49.11	-		T	
51.11	+/-0.030	51.11	-			
1.75	+/-0.030	1.75"	_		V	
58.38	+/-0.030	58.38	_			
63.50	+/-0.030	63.50"	_		<u>†</u>	
65.25	+/-0.030	68.25	-		T	
44.07						
11.87	+/-0.030	11.57"	_		· V	
14.75	+/-0.030	14-75	-		T	
26.00	+/-0.030	26.00	_	<del></del>	す	
40.87	+/-0.030	40.83"	-		<u> </u>	
45.00	+/-0.030	45,00	_		丁	
48.00	+/-0.030	48.00"	_		Τ	. ""
55.13	+/-0.030	55.13"			Т	
58.38	+/-0.030	58.35	-		<u>T</u> T	, ,
61.25	+/-0.030	(01,25	_		T	
61.88	+/-0.030	(cd1.88°	-		十	
64.63	+/-0.030	64.63			て	
7.00	./ 0.000					
7.63	+/-0.030	7.63"			<i>V</i>	
11.00	+/-0.030	11.00	_		<u> </u>	
22.50	+/-0.030	27.50	-		T	
35.13	+/-0.030	35.73	_		T	
36.50	+/-0.030	36.50	_		+	
40.00	+/-0.030	40.00			T T	
41.88	+/-0.030	41.88				
43.63	+/-0.030	43.63"	_		1	
6.75	+/-0.030	675°			ν	

DART AEROSPACE LTD	Work Order:	111572
Description: Cabin Floor Protector	Part Number:	D3574-5
Inspection Dwg: D3574 Rev: B		Page 2 of 2

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
9.50	+/-0.030	9.50"	-		V	
10.38	+/-0.030	10.382	-		V	
14.50	+/-0.030	14.50"	_		T	, , , , , , , , , , , , , , , , , , , ,
16.75	+/-0.030	16.75"	_		1	
19.00	+/-0.030	19.00	-		7	
24.13	+/-0.030	74.13"	_		7	
33.88	+/-0.030	33.86"	_		Т	
39.50	+/-0.030	39.50	_		T	
40.25	+/-0.030	40.25	-	- 7	-1	•
43.50	+/-0.030	43.50	-	· · · · · · · · · · · · · · · · · · ·	T	
43.83	+/-0.030	43.53"			T	
46.60	+/-0.030	46-60	_		T	
0.125	+/-0.010	0.1254			V	
						-

			DAS		
Measured by:	JM	Audited by:	27	Prototype Approval:	N/A
Date:	14-62-3	Date:	14-23	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	08.01.16	New Issue	KJ//DD	
В	08.07.31	1.13 dimension removed	KJ/DD , ,	
С	09.05.15	Dimensions updated per Dwg Rev B	KJ 😽	144











